

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method for fail-safe renaming of logical circuit identifiers for rerouted logical circuits in a data network, the method comprising:

providing a network management module in communication with first and second local access and transport areas and a failover network, the first local access and transport area in communication with the second local access and transport area via an inter-exchange carrier, the failover network in communication with the first and second local access and transport areas and separate from the inter-exchange carrier, and the network management module to:

monitor switches of a first logical circuit, the first logical circuit connecting the first and second local access and transport areas via the inter-exchange carrier, the switches located in the first and second local access and transport areas;

rename a first logical circuit identifier for the first logical circuit to a second logical circuit identifier for a second logical circuit utilized for rerouting data from the first logical circuit, the second logical circuit connecting the first and second local access and transport areas via the failover network; and

receive status information indicating that one of the switches is discarding frames or cells; and

identifying, in response to the status information, a failure in the first logical circuit; and

rerouting the data via the second logical circuit.

2. (Currently Amended) The method of claim 1, wherein the network management module renames the first logical circuit identifier for the first logical circuit to the second logical circuit identifier for the second logical circuit utilized for rerouting the data from the first logical circuit, by:

accessing a network device provisioned for routing data over the first logical circuit;

deleting the first logical circuit in the network device upon detecting [[a]] the failure in the first logical circuit;

provisioning the second logical circuit in the network device for rerouting the data from the first logical circuit, wherein provisioning the second logical circuit includes assigning the second logical circuit identifier to identify the second logical circuit; and

renaming the first logical circuit identifier to the second logical circuit identifier.

3. (Previously Presented) The method of claim 1, wherein the second logical circuit is a logical failover circuit.

4. (Previously Presented) The method of claim 1, wherein the second logical circuit is a currently unused logical circuit.

5. (Original) The method of claim 1, wherein the first logical circuit identifier is a data link connection identifier (DLCI).

6. (Original) The method of claim 1, wherein the second logical circuit identifier is a data link connection identifier (DLCI).

7. (Original) The method of claim 1, wherein the first logical circuit identifier is a virtual path/virtual circuit identifier (VPI/VCI).

8. (Original) The method of claim 1, wherein the second logical circuit identifier is a virtual path/virtual circuit identifier (VPI/VCI).

9. (Original) The method of claim 1, wherein the first and second logical circuits are permanent virtual circuits.

10. (Original) The method of claim 1, wherein the first and second logical circuits are switched virtual circuits.

11. (Previously Presented) The method of claim 1, wherein the first logical circuit is established in a frame relay network.

12. (Previously Presented) The method of claim 1, wherein the first logical circuit is established in an asynchronous transfer mode (ATM) network.

13. (Previously Presented) A system for fail-safe renaming of logical circuit identifiers for rerouted logical circuits in a data network, the system comprising:

- a network device to establish a communication path for a logical circuit and a logical failover circuit, the logical circuit connecting first and second local access and transport areas via an inter-exchange carrier, and the logical failover circuit connecting the first and second local access and transport areas via a failover network that is separate from the inter-exchange carrier;

- a logical element module in communication with the network device to configure the logical circuit and the logical failover circuit; and

- a network management module in communication with the first and second local access and transport areas and the failover network to:

- monitor switches of the logical circuit and located in the first and second local access and transport areas;

- receive status information indicating that one of the switches is discarding frames or cells;

- identify, in response to the status information, a failure in the logical circuit;

- delete the communication path for the failed logical circuit in the network device;

- establish the communication path for the logical failover circuit through the failover network to reroute data from the failed logical circuit;

- assign a logical failover circuit identifier to identify the logical failover circuit; and

- rename a logical circuit identifier for the failed logical circuit to the logical failover circuit identifier in a network database.

14. (Original) The system of claim 13, wherein the logical circuit identifier is a data link connection identifier (DLCI).

15. (Original) The system of claim 13, wherein the logical failover circuit identifier is a data link connection identifier (DLCI).

16. (Original) The system of claim 13, wherein the logical circuit identifier is a virtual path/virtual circuit identifier (VPI/VCI).

17. (Original) The system of claim 13, wherein the logical failover circuit identifier is a virtual path/virtual circuit identifier (VPI/VCI).

18. (Original) The system of claim 13, wherein the logical circuit and the logical failover circuit are permanent virtual circuits.

19. (Original) The system of claim 13, wherein the logical circuit and the logical failover circuit are switched virtual circuits.

20. (Previously Presented) The system of claim 13, wherein the logical circuit is established in a frame relay network.

21. (Previously Presented) The system of claim 13, wherein the logical circuit is established in an asynchronous transfer mode (ATM) network.

22. (Cancelled)

23. (Previously Presented) The method of claim 1, wherein the switches communicate the data via the first logical circuit, and wherein the network management module is separate from the switches that communicate the data.

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